

Orthoptic Department, Oxford Eye Hospital

How to use Fresnel Prisms

A guide for patients



This leaflet will give you information about Fresnel prisms and how they can help with your vision.

What are Fresnel prisms and why are they prescribed?

The reason why we prescribe a Fresnel prism is to help relieve double vision. A prism will move the position of one of the images you can see. It will help you to join the two images you can see (that have been caused by your double vision) so that you can achieve single vision.

A Fresnel prism is made from light plastic which can be easily fitted to your glasses. They come in a range of different strengths. They are used as a temporary treatment if your double vision is expected to change over time, or as a trial before a more permanent prism can be built into new glasses.

How do they fit onto my glasses?

The Orthoptist will have assessed your eye position and taken measurements to choose the correct strength of prism needed to help your double vision.

The prism will be cut to fit on to one lens of your glasses. Very occasionally a Fresnel prism will be fitted to both lenses.

The Fresnel prism is attached to the lens using water and will remain firmly in place once dry (this takes about 20 minutes). No glue or adhesive is needed or should ever be used if the prism comes loose.

The prism can easily be removed if it is unsuitable or needs to be adjusted as your double vision changes.

Will the prism affect how much I can see?

There may be a slight blurring of the vision in the eye looking through the prism, but with both eyes open you should have comfortable single vision. You may be aware of a slight 'rainbow' effect when looking at lights – this is caused by the prism splitting up the light into its different colours.

The prism will help you to get single vision when looking straight ahead, but you may still be aware of double vision when you look in different directions. This can happen more often if your double vision has been caused by a weak eye muscle(s). Try to move your head to look in different directions, rather than moving your eyes.

How long will I need to wear the prism?

This can vary considerably from person to person. For some people, the double vision can start to get better quite quickly and go after a few weeks. For others there is much slower recovery which can take several months.

Your double vision will change over the recovery period; sometimes it can become worse before getting better. It is for these reasons that we start off using a prism that can be changed to a different strength more easily. We don't rush to build a prism into a glasses prescription, as it could be very costly for you to keep changing your glasses if the strength of the prism needs to be adjusted. These expected changes are also the reason why you will need regular appointments with the Orthoptist. They will monitor measurements and check that the prism is still the correct strength.

If your double vision does not recover completely and has stayed at the same point of recovery for around 6 months, you will be given an appointment to see the Hospital Optometrist. They will carry out a glasses test and look into prescribing you a prism that is built into one or both of the lenses.

How do I clean my glasses with a prism attached to one lens?

The prism is attached to the back surface of the lens; you can clean the front of your glasses as normal.

The prism can be peeled off so that you can clean the back of your glasses. You can also clean the prism with a small amount of liquid soap, warm water and a soft nail brush or toothbrush.

To fix the prism back onto your glasses:

- Hold your glasses under some running water.
- Slide the smooth surface of the prism onto the back surface of the lens (make sure it is the same lens that you removed it from).
- Press down gently and squeeze out any large air bubbles.

If you do not feel confident about removing the prism, it is still possible to clean it using the items suggested above, being careful not to dislodge the prism.

Do not use any glasses cleaning product containing alcohol. This will make the prism go cloudy.

Prisms for spare glasses or sunglasses

We are not able to provide extra prisms free of charge. However, you can purchase additional prisms from your Orthoptist. Please ask your Orthoptist for details. You will need to bring your spare glasses/sunglasses in to the clinic for the prism to be fitted.

If you have any questions or problems with your Fresnel prism, please contact the Orthoptic Department:

Tel: 01865 234 742

Monday to Friday, 9.00am - 4.30pm

If you have a specific requirement, need an interpreter, a document in Easy Read, another language, large print, Braille or audio version, please call **01865 221 473** or email **PALSJR@ouh.nhs.uk**

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